

CLAIMS

What is claimed is:

5 1. A method for preventing a symptom of herpes simplex virus infection in an individual who has been exposed to herpes simplex virus, comprising administering a composition comprising a polynucleotide comprising an immunostimulatory sequence (ISS) to said individual, wherein the ISS comprises the sequence 5'-C, G-3', wherein a herpes simplex virus antigen is not administered in conjunction with administration of said composition, and wherein said composition is
10 administered in an amount sufficient to prevent a symptom of herpes simplex virus infection.

2. The method of claim 1, wherein the ISS comprises the sequence 5'-T, C, G-3'.

15 3. The method of claim 1, wherein the ISS comprises the sequence 5'-purine, purine, C, G, pyrimidine, pyrimidine, C, G-3' or 5'-purine, purine, C, G, pyrimidine, pyrimidine, C, C-3'.

4. The method of claim 3, wherein the ISS comprises a sequence selected from the group consisting of 5'-AACGTTCC-3', 5'-AACGTTTCG-3', 5'-GACGTTCC-3' and 5'-GACGTTTCG-3'.

20 5. The method of claim 1, wherein the ISS comprises the sequence 5'-TGACTGTGAACGTTTCGAGATGA-3' (SEQ ID NO:1).

6. The method of claim 1, wherein the ISS comprises the sequence 5'-TCGTCGAACGTTTCGTTAACGTTTCG-3' (SEQ ID NO:9).

7. The method of claim 1, wherein the individual is a mammal.

8. The method of claim 1, wherein administration is at a site of infection.

9. The method of claim 1, wherein the herpes simplex virus is a herpes simplex virus 2 (HSV-2) virus.

10. A method of reducing severity of a symptom of herpes simplex virus infection in an individual infected with herpes simplex virus, comprising administering a composition comprising a polynucleotide comprising an immunostimulatory sequence (ISS) to said individual, wherein the ISS comprises the sequence 5'-C, G-3', wherein a herpes simplex virus antigen is not administered in conjunction with administration of said composition, and wherein said composition is administered in an amount sufficient to reduce severity of a symptom of herpes simplex virus infection.

11. The method of claim 10, wherein the ISS comprises the sequence 5'-T, C, G-3'.

12. The method of claim 10, wherein the ISS comprises the sequence 5'-purine, purine, C, G, pyrimidine, pyrimidine, C, G-3' or 5'-purine, purine, C, G, pyrimidine, pyrimidine, C, C-3'.

13. The method of claim 12, wherein the ISS comprises a sequence selected from the group consisting of 5'-AACGTTCC-3', 5'-AACGTTCCG-3', 5'-GACGTTCC-3' and 5'-GACGTTCCG-3'.

14. The method of claim 10, wherein the ISS comprises the sequence 5'-TGACTGTGAACGTTCCGAGATGA-3' (SEQ ID NO:1).

15. The method of claim 10, wherein the ISS comprises the sequence 5'-TCGTCGAACGTTCCGTTAACGTTCCG-3' (SEQ ID NO:9).

16. The method of claim 10, wherein the composition is administered in an amount sufficient to reduce the level of viral shedding.

17. The method of claim 10, wherein the individual is a mammal.

18. The method of claim 10, wherein administration is at a site of infection.

5 19. The method of claim 10, wherein the herpes simplex virus is a herpes simplex virus 2 (HSV-2) virus.

10 20. A method of reducing recurrence of a symptom of herpes simplex virus infection in an individual infected with herpes simplex virus, comprising administering a composition comprising a polynucleotide comprising an immunostimulatory sequence (ISS) to said individual, wherein the ISS comprises the sequence 5'-C, G-3', wherein a herpes simplex virus antigen is not administered in conjunction with administration of said composition, and wherein said composition is administered in an amount sufficient to reduce recurrence of a symptom of herpes simplex virus infection.

15 21. The method of claim 20, wherein the ISS comprises the sequence 5'-T, C, G-3'.

22. The method of claim 20, wherein the ISS comprises the sequence 5'-purine, purine, C, G, pyrimidine, pyrimidine, C, G-3' or 5'-purine, purine, C, G, pyrimidine, pyrimidine, C, C-3'.

20 23. The method of claim 22, wherein the ISS comprises a sequence selected from the group consisting of 5'-AACGTTCC-3', 5'-AACGTTTCG-3', 5'-GACGTTCC-3' and 5'-GACGTTTCG-3'.

24. The method of claim 20, wherein the ISS comprises the sequence 5'-TGACTGTGAACGTTTCGAGATGA-3'.

25. The method of claim 20, wherein the ISS comprises the sequence 5'-TCGTCGAACGTTTCGTTAACGTTTCG-3' (SEQ ID NO:9).

26. The method of claim 20, wherein the individual is a mammal.

27. The method of claim 20, wherein administration is at a site of infection.

5 28. The method of claim 20, wherein the herpes simplex virus is a herpes simplex virus 2 (HSV-2) virus.

29. A kit for use in ameliorating or preventing a symptom of herpes simplex virus infection in an individual infected with, exposed to or at risk of being exposed to herpes simplex virus, comprising:

10 a composition comprising a polynucleotide comprising an immunostimulatory sequence (ISS), wherein the ISS comprises the sequence 5'-C, G-3' and wherein said kit does not comprise a herpes simplex virus antigen; and

instructions for administration of said composition to an individual infected with, exposed to or at risk of being exposed to herpes simplex virus.

15 30. The kit of claim 29, wherein the ISS comprises the sequence 5'-T, C, G-3'.

31. The kit of claim 29, wherein the ISS comprises the sequence 5'-purine, purine, C, G, pyrimidine, pyrimidine, C, G-3' or 5'-purine, purine, C, G, pyrimidine, pyrimidine, C, C-3'.

20 32. The kit of claim 31, wherein the ISS comprises a sequence selected from the group consisting of 5'-AACGTTCC-3', 5'-AACGTTTCG-3', 5'-GACGTTCC-3' and GACGTTTCG-3'.

33. The kit of claim 29, wherein the ISS comprises the sequence
5'-TGACTGTGAACGTTTCGAGATGA-3' (SEQ ID NO:1).

34. The kit of claim 29, wherein the ISS comprises the sequence
5'-TCGTCGAACGTTTCGTTAACGTTTCG-3' (SEQ ID NO:9).

5 35. The kit of claim 29, wherein the herpes simplex virus is a herpes simplex
virus 2 (HSV-2) virus.